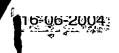


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What is claimed is:

- 1. A fuel composition, comprising:
 - (a) a diesel fuel;
 - (b) ethanol; and
 - (c) a surfactant comprising
- (1) a hydrocarbylphenol or derivative thereof that is a Mannich base or an alkoxylated Mannich base;
- (2) a reaction product of a hydrocarbyl-substituted polycarboxylic acid or anhydride and an alcohol, an amine, an amino alcohol, an epoxide, or a mixture thereof; or
- (4) a mixture thereof wherein the hydrocarbyl substituent of components (c)(1) and (c)(2) contains 4 to 20 carbon atoms; the ethanol comprises anhydrous ethanol containing up to about 0.1% by weight water, fuel grade ethanol containing up to 0.1% by weight water, or mixtures thereof; the diesel fuel is present at 50 to 99% by weight; the ethanol is present at 0.5 to 25% by weight; and the surfactant is present at 0.1 to 8% by weight and has a HLB value ranging from -30 to 20.
- 2. The fuel composition of claim 1 wherein the surfactant (c) further comprises at least one member selected from the group consisting of an alcohol, an alkoxylated alcohol, a fatty monocarboxylic acid or derivative thereof, and an alkoxylated hydrocarbylphenol.
- 3. The fuel composition of claim 2 wherein the diesel fuel contains aromatic hydrocarbons from 3 to 60% by volume, and the HLB value of the surfactant is directly proportional to the aromatic content of the diesel fuel.
- 4. The fuel composition of claim 2 wherein the derivative of the fatty monocarboxylic acid is an ester, an amide, an amine salt, a hydroxyalkyl-substituted amide, an aminoalkyl-substituted ester, an alkoxylated acid, or a mixture thereof.
- 5. The fuel composition of claim 2, further comprising:
 - (d) a combustion improver.
- 6. The fuel composition of claim 5 wherein the combustion improver comprises an inorganic nitrate salt, a hydroxylamine compound, an organic nitro compound, a compound having at least one strained ring group containing 3 to 5 ring atoms, or a mixture thereof.

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- 7. The fuel composition of claim 1 wherein the surfactant comprises the Mannich base, the alkoxylated Mannich base, or a mixture thereof.
- 8. The fuel composition of claim 7 wherein the Mannich base is prepared by the Mannich reaction of a hydrocarbylphenol, an aldehyde, and an amine.
- 9. The fuel composition of claim 8 wherein the Mannich base is the reaction product of dodecylphenol, formaldehyde, and diethanolamine.
- 10. The fuel composition of claim 1 wherein component (c)(2) is the reaction product of an alkenylsuccinic anhydride and a tertiary amino alcohol.
- 11. The fuel composition of claim 1 wherein the diesel fuel comprises a middle distillate fuel, a Fischer-Tropsch fuel, a biodiesel fuel, or mixtures thereof.
- 12. The fuel composition of claim 5 wherein the diesel fuel is present at 55 to 99% by weight, the surfactant is present at 0.3 to 7% by weight, and the combustion improver is present at 0.005 to 10% by weight.
- 13. A method of operating a compression-ignited internal combustion engine, comprising:

fueling the engine with the fuel composition of claim 1.

- 14. The method of claim 13 wherein the surfactant (c) further comprises at least one member selected from the group consisting of an alcohol, an alkoxylated alcohol, a fatty monocarboxylic acid or derivative thereof, and an alkoxylated hydrocarbylphenol.
- 15. The method of claim 13 wherein the fuel composition further comprises (d) a combustion improver.
- 16. A method of providing performance advantages to a compression-ignited internal combustion engine, comprising:

fueling the engine with the fuel composition of claim 1.

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17. The method of claim 16 wherein the fuel composition further comprises (d) a combustion improver.

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